

**WHAT IS CLAIMED IS:**

1. A method of preparing cells as a cancer therapy for administration to a subject with cancer comprising culturing the cells in the presence of an MIF antagonist.
- 5 2. The method of claim 1 in which the MIF antagonist is selected from the group consisting of anti-MIF antibodies, MIF antisense cDNA, and antagonists of MIF ligand:receptor binding.
- 10 3. A method of preparing cells as a cancer therapy for administration to a subject with cancer comprising culturing the cells in the presence of anti-MIF antibodies.
4. The method of claim 3 in which the anti-MIF antibodies are monoclonal.
- 15 5. The method of claim 4 in which the monoclonal anti-MIF antibodies are selected from the group consisting of human monoclonal antibodies, humanized monoclonal antibodies, chimeric monoclonal antibodies and single-chain monoclonal antibodies.
6. A method of preparing a cellular composition as a cancer therapy for administration to a subject with cancer comprising incubating cells of the composition in the presence of (a) at least one tumor antigen and (b) anti-MIF antibodies.
- 20 7. A method of preparing autologous cells for administration to a subject with cancer comprising the step of incubating the cells in the presence of an

agent, said agent selected from the group consisting of anti-MIF antibodies, MIF-binding fragments thereof, or both.

8. A method of preparing autologous cells for administration to a subject with cancer comprising the step of incubating the cells in the presence of  
5 (a) at least one tumor antigen and (b) an agent, said agent selected from the group consisting of anti-MIF antibodies, MIF-binding fragments thereof, or both.

9. The method of claim 7 in which the autologous cells comprise immune cells.

10. The method of claim 7 in which the autologous cells comprise T  
10 cells.

11. The method of claim 7 in which the autologous cells comprise CD8<sup>+</sup> cells.

12. A cellular composition for administration to a subject with cancer comprising cells incubated with anti-MIF antibodies.

15. The cellular composition of claim 12 in which the cells incubated with anti-MIF antibodies are also incubated with at least one tumor antigen.

14. The cellular composition of claim 12 in which the incubation with anti-MIF antibodies is *ex vivo*.

20. The cellular composition of claim 12 that is isolated from unbound anti-MIF antibodies.

16. The cellular composition of claim 13 that is isolated from unbound anti-MIF antibodies and unbound tumor antigen.

17. The cellular composition of claim 13 in which the cells comprise immune cells.

18. The cellular composition of claim 13 in which the cells comprise T cells.

5 19. The cellular composition of claim 13 in which the cells comprise CD8<sup>+</sup> cells.